

**North Carolina Department of Transportation
PROJECT ENVIRONMENTAL CONSULTATION FORM
I.D. No. U-2525 B**

I. GENERAL INFORMATION

- | | | |
|----|---------------------|--|
| a. | Consultation Phase: | Construction Consultation for U-2525B |
| b. | Project Description | Greensboro Eastern Loop from North of US 70 Relocation to US 29 North of Greensboro |
| c. | WBS Element Number | 34821.1.1 |
| d. | Document Type: | State Final Environmental Impact Statement, August 12, 1994 State Record of Decision, March 7, 1995 U-2525B R/W Consultations, 3/31/09, 6/14/10, & 2/24/12 |

II. CONCLUSIONS

The above environmental document has been reevaluated as required by 23 CFR 771. It was determined that the current proposed action is essentially the same as the original proposed action: Proposed changes, if any, are noted below in Section III. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above referenced document(s) unless noted otherwise herein. Therefore, the original Administration Action remains valid.

III. CHANGES IN PROPOSED ACTION AND ENVIRONMENTAL CONSEQUENCES

DESIGN CHANGES

No design changes were made since the completion of the February 2012 Right of Way Consultation.

WATER RESOURCES

Water resources and their classifications have changed since the Right-of-Way consultations were completed. Current water resources in the study area include 4 unnamed tributaries (UT) to South Buffalo Creek, 18 UTs to North Buffalo Creek, and 4 UTs to UT at Camp Herman, 2 ponds, and 34 riparian wetlands. The North Carolina Division of Water Resources classification for all listed water resources changed from C; NSW in the referenced documents to WS-V; NSW.

There are no designated Outstanding Resource Waters (ORW), High Quality Waters (HQW), Water Supply I (WS-I), or Water Supply II (WS-II) waters within 1.0 mile of the project area. North Buffalo Creek and South Buffalo Creek, including their UTs, within the project area and within a mile of the project area are listed on the 2012 303(d) Final List of Impaired Waters of North Carolina due to standard violations of Copper (2008) and Zinc (2008). North Buffalo Creek, including its UTs, is also listed for standard violation of nitrite-nitrate nitrogen series (2012).

FEDERALLY PROTECTED SPECIES

As of its most recent update on December 3, 2012, the U.S. Fish and Wildlife Service (USFWS) lists one federally protected species for Guilford County: small whorled pogonia. No new species have been added or deleted since the completion of the referenced documents.

Surveys for small whorled pogonia were conducted by Atkins, Inc. biologists on June 13-15 and June 18-19, 2012 in areas of suitable habitat. No specimens were found. A review of the North Carolina Natural Heritage Program (NCNHP) database on November 13, 2013, indicated no occurrences of small whorled pogonia within one mile of the project study area. Therefore, the biological conclusion of 'No Effect' was determined for small whorled pogonia which will remain valid for five years.

HISTORIC ARCHITECTURAL RESOURCES

The Schoolfield-Hatcher Farm Historic Structures and Landscape Recordation Plan was completed in October 2010 as part of the stipulations for the Schoolfield-Hatcher Farm Memorandum of Agreement (MOA). Also, the MOA stipulated that a landscape plan for the Schoolfield-Hatcher Farm property be developed. The landscape plan was developed and approved by the State Historic Preservation Office on January 21, 2014 and will be implemented after the project is constructed. See Appendix A for the landscape plan.

ARCHAEOLOGICAL RESOURCES

When the earlier archaeological surveys were completed, access was denied to several parcels in the project study area, including the Louise Coble parcel within the proposed SR 2770 (Huffine Mill Road) / Greensboro Urban Loop interchange. The Coble Parcel archaeological survey was completed in January 2014, and the survey identified one archaeological site and two isolated finds with unknown prehistoric lithic components. None of the sites were recommended eligible for the National Register for Historic Places (NRHP), and no further archaeological investigation was recommended for this project as it is currently defined.

NOISE ABATEMENT

The Traffic Noise & Air Quality Group assessed traffic noise levels for the residential area (single-family homes and mobile homes) in the southeast quadrant of US 29 and the Greensboro Eastern Loop interchange that was not included in previous studies. This analysis documents the assessment of predicted loudest-hour equivalent existing, no build, and build condition traffic noise levels. In accordance with the NCDOT Traffic Noise Abatement Policy (July 2011), abatement measures were considered for the benefit of the impacted Design Year (2040) Build condition traffic noise impacts.

A noise barrier was evaluated for the impacted receptor (R-7) in the vicinity of the mobile home park to determine if feasibility and reasonableness criteria could be met. A noise barrier was predicted to provide at least a 5 dB (A) noise reduction for three receptors, and as much as 7 dB (A) noise level reduction for one front row receptor. At 1,749 feet in length, and with an area of 28,899 square feet, the total area per predicted benefited receptor would be 7,225 square feet which is above the allowable 2,640 square feet per benefit. Therefore, a noise barrier in this location would not be reasonable and is not recommended for construction. This analysis completes all requirements of the NCDOT Traffic Noise Policy and federal traffic noise regulations found in 23 CFR 772.

IV. LIST OF ENVIRONMENTAL COMMITMENTS

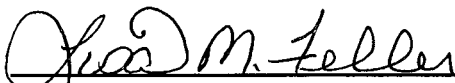
See attached green sheets for Project Commitments.

V. COORDINATION

Current project proposals have been discussed with others as follows:

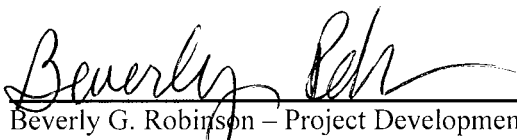
| | | |
|--------------------------------|------------------------------|----------------------------------|
| Roadway Design Unit: | <u>Danny Gardner, P.E.</u> | <u>December 20, 2013</u> Date |
| Permits Section: | <u>Greg Price</u> | <u>November 13, 2013</u> Date |
| Noise Section: | <u>TeakKeun Kim, Ph.D.</u> | <u>October 22, 2013</u> Date |
| Natural Environment Section: | <u>Jamie Lancaster, P.E.</u> | <u>December 19, 2013</u> Date |
| Archaeology Section: | <u>Paul Mohler</u> | <u>January 14, 2014</u> Date |
| Historic Architecture Section: | <u>Shelby Reap</u> | <u>January 21, 2014</u> Date |
| Programs Management Section | <u>Sarah Garcia</u> | <u>January 30, 2014</u> Date |

VI. NCDOT CONCURRENCE



Lisa M. Feller, P.E. - Project Development Engineer
Project Development and Environmental Analysis Unit

2/10/14
Date



Beverly G. Robinson - Project Development Group Supervisor
Project Development and Environmental Analysis Unit

2/10/14
Date

PROJECT COMMITMENTS
Greensboro Eastern Loop
Guilford County
WBS Element 34821.1.1
TIP Project U-2525
Construction Consultation for U-2525B

Current status, changes, or additions to the project commitments as shown in the environmental document for the project are printed in bold, underlined italics.

Project Development & Environmental Analysis Branch and Roadway Design Unit

Noise abatement measures will continue to be considered throughout the design phase of the project.

NOTE: Based on the noise wall survey results, the noise wall at the SR 2827 (Four Mile Loop Road) – Relocated US 70(Burlington Road) interchange will not be built. Also, based on the noise analyses performed for the SR 2568 (Assembly Road) area at the US 29 interchange, the results showed that there are no anticipated noise impacts in accordance with NCDOT's Traffic Noise Abatement Policy. Noise abatement is not required for Quail Oaks subdivision.

NOTE: The US 29 interchange redesign developed in 2009 to avoid numerous impacts to Quail Oaks Subdivision was reviewed, and noise abatement is not required for Quail Oaks subdivision.

NOTE: The Kerenoff neighborhood service road redesign developed in 2011 was reviewed, and noise abatement is not required for Kerenoff subdivision.

NOTE: The southeast quadrant of the US 29/Greensboro Loop interchange was reviewed since this interchange quadrant was not included in previous studies. A noise barrier was predicted to provide at least a 5 dB (A) noise reduction for three receptors, and as much as a 7 dB (A) noise level reduction for one front row receptor. However, the total area of the barrier per predicted benefited receptor was above the allowable square footage per benefit; therefore, a noise barrier in this location would not be reasonable and is not recommended for construction.

Sidewalks will be incorporated into the project. Further coordination is needed with the City of Greensboro regarding the specific sidewalk locations. A municipal agreement will be executed for Greensboro's participation.

NOTE: According to NCDOT's Pedestrian Policy guidelines, any pedestrian facilities that the City of Greensboro wishes to incorporate into the project plans must be sent in writing to NCDOT by the Project Final Field Inspection (FFI) date.

NOTE: The City of Greensboro has verbally requested that sidewalks be incorporated into all proposed curb and gutter construction along –Y- lines. NCDOT will provide the City with cost estimates to initiate the municipal agreement process.

NOTE: The municipal agreement is currently being finalized for signatures.

Hydraulics Unit

The final designs will be coordinated with appropriate state and local officials and the Federal Emergency Management Agency (FEMA) to assure compliance with FEMA, state, and local floodway and floodplain regulations.

NOTE: Standard Commitment.

The design of any necessary drainage structures at greenways will be coordinated with the Guilford County Parks and Recreation Department.

NOTE: There are no greenways located within the U-2525 B project limits.

Bridges will be considered during the design phase at major waterway and floodplain crossings.

NOTE: Bridges span North Buffalo Creek, and the bridge at SR 2825 (Camp Burton Road) was lengthened to span an unnamed tributary of North Buffalo Creek and wetlands.

Location and Surveys Unit

Geodetic survey control monuments will be located during design, and the U.S. Coast and Geodetic Survey and North Carolina Geodetic Survey will be notified of their location.

NOTE: Standard Commitment.

Roadside Environmental Unit, Hydraulics Unit and Division 7

NCDOT's "Best Management Practices for Protection of Surface Waters" will be implemented, where applicable, including hazardous spill catch basins in water supply watershed critical areas where the roadway crosses a water supply.

NOTE: Standard Commitment.

Geotechnical Unit and Division 7

Any underground storage tanks discovered during construction will be reported to the North Carolina Division of Environmental Management.

NOTE: Standard Commitment.

Project Development and Environmental Analysis Branch

Mitigation for unavoidable wetland loss will be provided through implementation of a wetland mitigation plan developed during the permitting phase of the project.

NOTE: Standard Commitment.

Recommendations to restore stream segments to resemble the destroyed habitat will be considered where practicable. Banks and beds of relocated channels will be stabilized with vegetation or other protective devices as practicable, including consideration of using logs to line banks.

NOTE: NCDOT plans to use on-site stream mitigation, including relocation, restoration, and enhancement to offset unavoidable impacts to existing streams caused by the Greensboro Eastern Loop construction.

NOTE: The on-site mitigation commitment has been fulfilled. NCDOT has provided 2055 LF of on-site stream mitigation at three sites through stream relocation and restoration. The remainder of the mitigation will be provided by the Ecosystem Enhancement Program (EEP).

Surveys for small whorled pogonia will be required for U-2525 B due to the presence of potential, but limited, habitat. These surveys will be conducted within two to three years of the project Let date.

NOTE: Small whorled pogonia surveys will be conducted within the project area later this year (2012) in the appropriate season.

NOTE: Surveys for small whorled pogonia were conducted by Atkins, Inc. biologists on June 13-15 and June 18-19, 2012 in areas of suitable habitat. No specimens were found. A review of the North Carolina Natural Heritage Program (NCNHP) database on November 13, 2013, indicated no occurrences of small whorled pogonia within one mile of the project study area. Therefore, the biological conclusion of 'No Effect' was determined for small whorled pogonia which will remain valid for five years.

A combined Screening ICE and ICE Land Use Scenario Assessment will be completed prior to obtaining permits for the project.

NOTE: The ICE and ICE Land Use Scenario Assessment report was completed on October 30, 2009.

NCDOT will mitigate for all of the wetland and stream impacts contained within Quadrant D of the US 29 interchange including areas not directly impacted by construction.

NOTE: The permit included this mitigation.

U-2525 B and C will be permitted together using a phased permit. Preliminary plans for U-2525 C will need to be submitted when permit drawings for U-2525 B are submitted.

NOTE: The permit included this commitment.

Project Development and Environmental Analysis Branch and Division 7
Historic Architecture Stipulations:

1. *Recordation:*
Prior to the initiation of construction, NCDOT will record the existing condition of the Schoolfield-Hatcher Farm and its surroundings in accordance with the attached Historic Structures and Landscape Recordation Plan (~~Appendix A~~).

NOTE: The Schoolfield-Hatcher Farm Historic Structures and Landscape Recordation Plan was completed in October 2010.

2. *Landscape Plan:*
In consultation with SHPO and the property owner, NCDOT will develop a landscape plan for the Schoolfield-Hatcher property. Installation of plantings will be limited to the non-wooded areas of the parcel north and east of the roadway. As the installed plantings mature, they are intended to form a natural buffer between the roadway and the farm's primary structures. NCDOT will replace in kind any landscape elements which die within two years of installation.

NOTE: The Schoolfield-Hatcher Farm landscape plan was developed and approved by the State Historic Preservation Office on January 21, 2014. See Appendix A for the landscape plan. A separate contract for landscaping will be developed by Division 7, and the landscaping will be installed after the roadway construction is completed. NCDOT will replace in kind any landscape elements planted as a buffer for the Schoolfield-Hatcher property which die within two years of installation.

3. *Shifted Roadway Alignment:*
The original middle alternative alignment (ALT-1) will be shifted away from the farm's primary structures as described in the shifted alternative (ALT-2) (~~Appendix A~~).

NOTE: The alignment was shifted as described in the shifted alternative (ALT-2) to reduce impacts to the Schoolfield-Hatcher Farm.

4. *Access:*
The new transportation facility with control-of-access fencing will divide the farm into two discontinuous parcels. Access to the first parcel, containing the house and primary farm structures, will be retained via the current driveway. NCDOT will provide a cul-de-sac to allow access to the second parcel.

NOTE: The driveway and cul-de-sac are included in the U-2525 B final design plans.

Project Development and Environmental Analysis Unit, Division 7 and Project Services Unit

Archaeological Commitments:

1. *Archaeological Monitoring*

*The NCDOT will monitor initial ground-disturbing activities within the property limits of Sites 31GF452** (Schoolfield-Hatcher Farm, U-2525B) and 31GF466 (Site in SE Quadrant of the proposed SR 2352 (North Elm Street) interchange, U-2525 C) in accordance with the attached Archaeological Monitoring Plan (see Appendix B).*

Archaeological Monitoring Plan (to be included in the construction contract proposal)

NCDOT (Archaeology Group) Contact Information: Matt Wilkerson, 919-707-6089.

- The contractor will contact the NCDOT (Archaeology Group) when ground-disturbing activities are anticipated within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange).
- The contractor will provide 48-hours notice to the NCDOT (Archaeology Group) prior to ground-disturbing activities within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange). The 48-hour period will begin upon acknowledgment by the NCDOT (Archaeology Group) that the contractor has contacted them.
- The NCDOT (Archaeology Group) will be on-site during ground-disturbing activities in order to monitor said activities within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange). Monitoring activities may include, but not be limited to: 1) cleaning and photographing areas exposed during construction, 2) mapping both plan and profile views of open trenches, and 3) collecting materials or artifacts exposed during construction. The NCDOT (Archaeology Group) will have the authority to halt all construction work within the property limits of Site 31GF452** (Schoolfield-Hatcher Farm) and Site 31GF466 (i.e., SE quadrant of Elm Street Interchange) in order to assess the need for further archaeological excavations.
- Should archaeological resource(s) deemed eligible for the National Register of Historic Places (NRHP) be discovered during the monitoring phase as determined by the NCDOT (Archaeology Group), then all work will be halted within the limits of the NRHP resource and the State Historic Preservation Office will be contacted. As per the Memorandum of Agreement (MOA), the SHPO will consult with the NCDOT (Archaeology Group), on-site if necessary, in order to develop appropriate protection/mitigation measures for the resource(s). Appropriate measures for the resource(s) may include preservation in place, photographing and mapping, and/or additional archaeological excavations.
- Both the SHPO and the NCDOT (Archaeology Group) will agree upon and provide to the contractor a written description of the measures required for the resource(s). The description will include a schedule for implementing and completing the measures. Upon receipt of written confirmation from the NCDOT (Archaeology Group) that the resource measures have been completed, construction activities may resume in the location containing the resource.

2. *Archaeological Data Recovery*

Sites 31GF456 (Site near Summit Avenue, U-2525 C) and 31GF466 (Site in SE Quadrant of the proposed SR 2352 (North Elm Street) interchange,

U-2525 C) are recommended as eligible for the National Register of Historic Places (NRHP). Both archaeological sites will be avoided by the Undertaking as currently designed; however, if design plans change prior to construction thereby causing an adverse impact to either of these sites, the NCDOT, in consultation with the SHPO and USACE will develop archaeological Data Recovery Plans (DRPs) in order to mitigate the adverse impact(s) to these sites. Given their proximity to the Undertaking, a visual barrier will be placed along the proposed ROW in order to avoid and prevent any disturbance(s) to these sites.

NOTE: Both sites are located within the U-2525 C project limits and will be reviewed during future consultations for U-2525 C.

3. Cemetery Removal and Relocation

The May/Hudson Cemetery (Site 31GF445** in the NE quadrant of the proposed interchange at SR 2770 (Huffine Mill Road), U-2525 B) cannot be avoided and will be relocated in accordance with the provisions of NCGS Chapter 65.

4. Access-Denied Areas

Of the five (5) areas not surveyed during the study due to denial of access, only the Louise Coble parcel (15.64 acres within the proposed SR 2770 (Huffine Mill Road) interchange, U-2525 B) is to be affected by the Undertaking and will require additional investigations once access has been granted or ROW has been acquired and prior to any construction activities.

NOTE: The Coble Parcel archaeological survey was completed in January 2014 and identified one archaeological site and two isolated finds with unknown prehistoric lithic components. None of the sites are recommended eligible for the NRHP, and no further archaeological investigation is recommended for this project as it is currently defined.

Project Development and Environmental Analysis Branch, Roadside Environmental Unit and Division 7

NCDOT will adhere to Design Standards for Sensitive Watersheds in the areas of the 5 unnamed tributaries (UTs) of South Buffalo Creek that drain into a section of the creek designated as Section 303(d) waters due to turbidity.

NOTE: Since South Buffalo Creek and its UTs are not listed on the 2012 303(d) Final List of Impaired Waters of North Carolina for turbidity or sedimentation, NCDOT will not need to adhere to Design Standards for Sensitive Watersheds as previously mentioned.

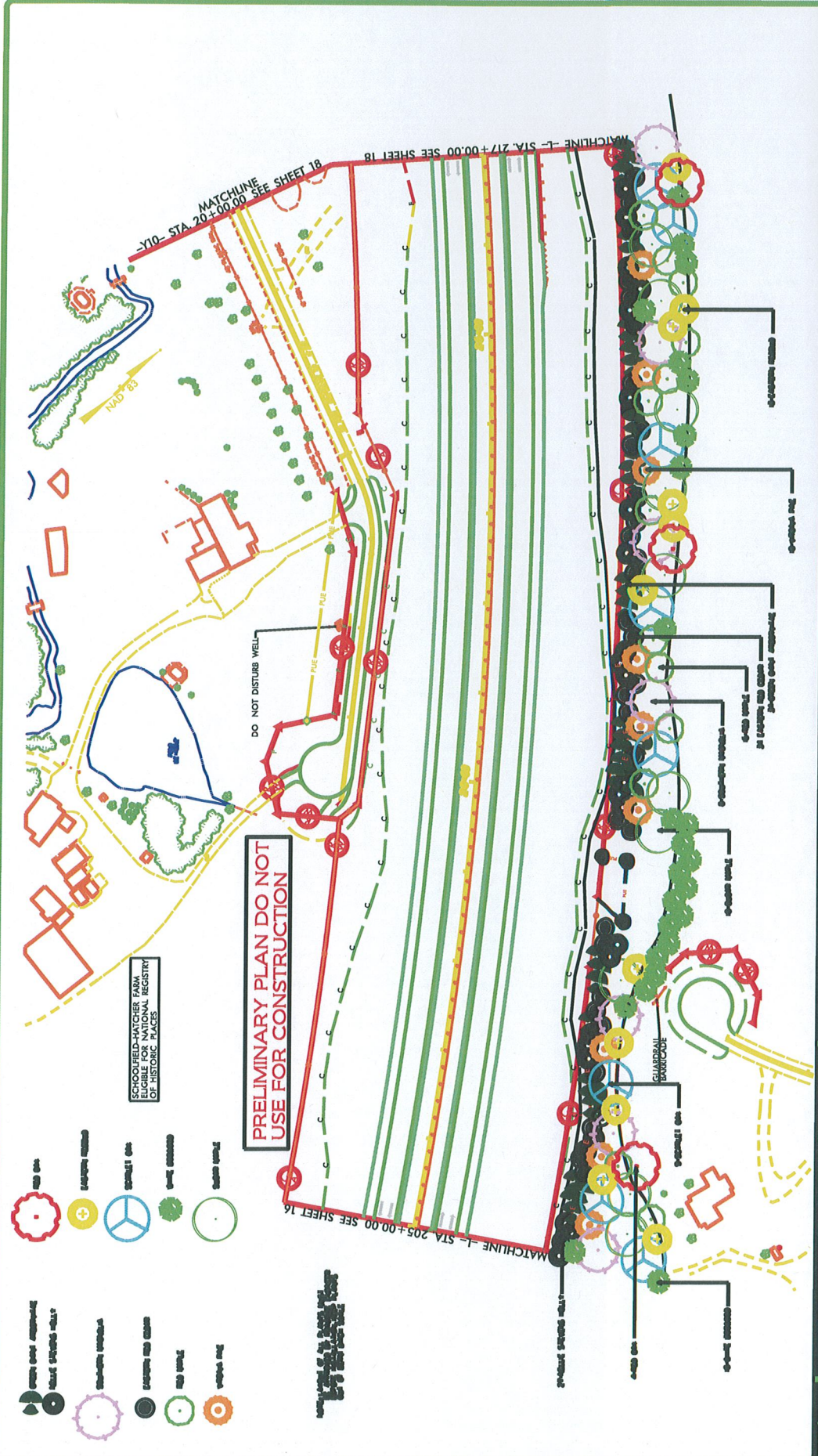
NOTE: The noise wall that was warranted in the northeast quadrant of the SR 2827 (Four Mile Loop Road) – Relocated US 70 (Burlington Road) interchange will not be built based on the noise wall survey results. Landscape screening will be utilized instead of a noise wall. The landscape plans will be developed and planting will occur after the roadway construction is completed.

APPENDIX A

Schoolfield-Hatcher Farm Landscape Plan



SHEET NO: **L-11**
TOTAL SHEET NO: **15**



LANDSCAPE DESIGN & DEVELOPMENT
1557 MAIL SERVICE CENTER, RALEIGH, NC 27699-1557
PH: 919-707-2920 FAX: 919-715-2554
[HTTP://WWW.NC DOT.ORG/OPERATIONS/OPS_CHIEF_ENG/ROADSIDES/](http://www.ncdot.org/operations/ops_chief_eng/roadsides/)

SCHOOLFIELD - HATCHER FARM
GREENSBORO EASTERN LOOP
PROJECT #: **34821.1.1**

REV. DESCRIPTION: *[Signature]*

HISTORIC MITIGATION
PLANTING PLAN

DATE: **APRIL / 2013**
CHECKED BY: *[Signature]*
FINAL DESIGN DATE: *[Signature]*

L-11
TOTAL SHEET NO: **15**